

cl (SEQ ID NO: 58); plasmin + GCYKNRDCG (SEQ ID NO: 58); GCY-DLys-N-DArg-DCG (SEQ ID NO: 66); and plasmin + GCY-DLys-N-DArg-DCG (SEQ ID NO: 66). Plasmin (micromolar) was present at 1/1000 the concentration of the peptide (millimolar) and hence did not affect overlain absorbance chromatograms. Overlaying the traces (absorbance at 220 nm or 278 nm) of the peptide elutions vs. those of the peptide + plasmin, demonstrated that the most of the GCYKNRDCG (SEQ ID NO: 58) peptide was degraded in approximately 1 hour at 37 C. The GCY-DLys-N-DArg-DCG (SEQ ID NO: 66) peptide however, was unaffected by the plasmin at 24 hours, and remained unaffected over the lifetime of the plasmin in the sample (sample injected for C18 at 2 weeks).

Please replace the paragraph on page 74, line 24 – page 75, line 15 with the following paragraph rewritten in clean form:

c2 PEG gels were prepared as described above, using the peptide GCGYGRGDSPG (SEQ ID NO: 61). Most cells have receptors that recognize the sequence GRGDSPG (SEQ ID NO: 74), and cells will interact with surfaces displaying immobilized RGD containing peptides. To test cellular interactions of cells with PEG gels containing peptides incorporated via conjugate addition, gels were formed and human umbilical vein endothelial cells were seeded onto the gels. The change in the shape of the cells on the surface was observed, which indicated that the cells were interacting with the peptides on the surface. The change in shape is referred to as spreading, and refers to the change of the cell

C² shape from spherical to flattened and polygonal on the surface. No cell spreading occurred on the PEG gels without peptide, and the specificity of the GCGYGRGDSPG (SEQ ID NO: 61) peptide was confirmed by comparison with gels containing the peptide GCGYGRRDGSPG (SEQ ID NO: 68), which contains the same amino acids, but in a different sequence, and which has no biological activity. Cells were seeded onto the gels at a concentration of 400 cells per mm², and the number of spread cells per area were counted at different times (see Figure 6). The experiments were performed using the normal cell culture medium. Cells could only spread on gels that contained the peptide GCGYGRGDSPG (SEQ ID NO: 61), which was incorporated into the gels utilizing a conjugate addition reaction.

Please replace the paragraph on page 76, line 20 – page 77, line 1 with the following paragraph rewritten in clean form:

C³ Microspheres are formed via conjugate addition cross-linking of PEG-triacrylate and the peptide GCYdKNdRDCG (SEQ ID NO: 66) as in Example 7, but additionally the peptide GCGYGRGDSPG (SEQ ID NO: 61) is also included in the reaction mixture, at a ratio of 1 GCGYGRGDSPG (SEQ ID NO: 61) to 8 GCYdKNdRDCG (SEQ ID NO: 66). The bioactive peptide is tested for the ability to localize microspheres to the surfaces of cells, as compared with microspheres containing no bioactive peptide.
